IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) Group Art Unit: 2144
Gabriel Wechter et al.) Examiner: Umar Cheema
Application No.: 10/667,862) Confirmation No.: 1387
Filed: September 23, 2003)
For: METHOD AND SYSTEM FOR DETERMINING A NETWORK MANAGEMENT SCALABILITY THRESHOLD OF A NETWORK MANAGER WITH RESPECT TO A NETWORK))))

APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Appeal is from the decision of the Examiner in the Final Office Action mailed June 17, 2008, and Applicant's Notice of Appeal filed September 17, 2008, setting a period for response that extends through November 17, 2008.

Please charge the \$540.00 fee for filing this Appeal Brief to Deposit Account No. 08-2025. The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 08-2025.

I. Real Party in Interest

The present application is assigned to Hewlett-Packard Company. Hewlett-Packard Company is the real party in interest, and is the assignee of Application No. 10/667,862.

II. Related Appeals and Interferences

None.

III. Status of Claims

Claims 1-27 were originally filed in this application. The present status of the claims is as follows:

claims 1-27 are currently pending;

claims 1-27 are rejected; and

claims 1-27 are being appealed.

IV. Status of Amendments

None

V. Summary of Claimed Subject Matter Recited in Claims 1, 10 and 19

Applicant's FIG. 1 provides a non-limiting embodiment broadly encompassed by Applicant's claims 1, 10 and 19. As illustrated in FIG. 1, a process is disclosed for determining a network management scalability threshold of a network manager with respect to a network. The exemplary embodiment includes gathering information about the network (step 102), gathering information about the network manager (step 104), and determining a maximum size threshold of a zone in the network based on the gathered network information and the gathered network manager information (step 106).

The present application contains three (3) independent claims 1, 10 and 19. A mapping of each of the independent claims to one instance of an exemplary embodiment described in the disclosure is set forth in the following table:

Claim 1: A method of determining a network	FIC 1.
management scalability threshold of a network manager	FIG. 1;
with respect to a network, comprising:	P. 2, ¶ 0004, II. 4-10
gathering information about the network;	FIG. 1, 102;
	P. 3, ¶¶ 0008-0009
gathering information about the network manager; and	FIG. 1, 104;
	P. 3, ¶ 0010
determining a maximum size threshold of a zone in the	FIG. 1, 106;
network based on the gathered network information and	P. 3, ¶ 0011;
the gathered network manager information.	P. 5, ¶ 0015
Claim 10. A system for determining a network	FIG. 2;
management scalability threshold of a network manager	P. 2, ¶ 0004, II. 11-17;
(210) with respect to a network (206), comprising:	Pp. 11-12, ¶ 0020
means for	FIG. 2;
	Pp. 11-12, ¶ 0020
gothering information about the natwork	FIG. 2;
gathering information about the network,	Pp. 11-12, ¶ 0020
gathering information about the network manager,	FIG. 2;
and	Pp. 11-12, ¶ 0020
determining a maximum size threshold of a zone in	
the network based on the gathered network information	FIG. 2;
and the gathered network manager information (210); and	Pp. 11-12, ¶ 0020
means for connecting the network manager to the	FIG. 2;
network (212).	Pp. 11-12, ¶ 0020
Claim 19. A machine readable medium comprising a computer program for causing a computer to perform:	FIG. 1;
	P. 2, ¶ 0004, II. 4-10;
	Pp. 6-11, ¶ 0019
gathering information about a network;	FIG. 1, 102;
	P. 3, ¶¶ 0008-0009
gathering information about a network manager	FIG. 1, 104;
arranged to monitor the network; and	P. 3, ¶ 0010
determining a maximum size threshold of a zone in the	FIG. 4. 400:
network based on the gathered network information and	FIG. 1, 106;
the gathered network manager software program	P. 3, ¶ 0011;
information.	P. 5, ¶ 0015

VI. Grounds of Rejection to be Reviewed on Appeal

Whether claims 1-27 are patentable under 35 U.S.C. § 102(e) over U.S. Patent No. 7,143,153 to *Black et al.* ("*Black"*).

VII. Argument

Rejection of Claims 1-27 Under 35 U.S.C. §102(e) Over Black.

In order to properly anticipate Applicant's claims under Section 102(e), each and every element of the claim in issue must be found, either expressly described or under the principles of inherency, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) The identical invention must be shown in as complete detail as contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Further, the elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Claim 1: Black cannot support a rejection of claim 1 under Section 102(e) because the patent fails to disclose, at least, "gathering information about the network manager" and "determining a maximum size threshold of a zone in the network," as recited in claim 1.

Black discloses a method for monitoring network devices based on the detection of threshold events in the network devices. (*Black*, col. 4:1-19.) In response to a detection, network management system (NMS) is notified of a thresholding code of the threshold event and responds in accordance with an action defined within the thresholding code. (*Black*, cols. 3:4-10, 4:1-19.) Actions can include notifying a network manager of the threshold event, and sending a notice to network management system software external to the network device. (*Black*, col. 4:1-19.)

The Examiner apparently asserts that *Black's* network management system (e.g., 60) and network device (e.g., 540) correspond to Applicant's claimed "network manager" and

"network," respectively. (Final Office Action, pp. 2-3.) In addition, the Examiner appears to assert that *Black's* disclosure of detecting a threshold event in an application within a network device corresponds to Applicant's "gathering information about the network manager." (*Id.*) Applicant disagrees.

According to the Examiner, *Black* teaches Applicant's claimed "gathering information about the network manager" at column 1, lines 35-50; column 63 lines 29-48; FIG. 13B, column 67, lines 40-67; and column 68, lines 1-8 (Final Office Action, pp. 8-9.) On the contrary, column 1, lines 35-50 disclose a network management systems that <u>receive</u> information <u>from</u> a network device when an attribute *of the device* falls below a threshold.

In addition, column 67, lines 40-67 & column 68, lines 1-8 disclose a "network manager selectively configur[ing] certain of the applications and gathering data related to UDS etc." (Final Office Action, p. 9.) But, as shown in FIG. 13C, UDS (usage data server) 412 is located in a network device 540 that sends management data to network management system (NMS) sever 851a in workstation 62. Thus, the portions of *Black* cited by the Examiner merely disclose a network management system (NMS) that receives information about network devices.

A network manager that receives information about a network device cannot be considered to teach "gathering information about the network manager," as recited in Applicant's claim 1. (Emphasis added.) Black, therefore, also cannot disclose "determining a maximum size threshold of a zone in the network based on ... the gathered network manager information" (emphasis added), as recited in claim 1.

Furthermore, *Black* does not disclose Applicant's claimed "determining a maximum size threshold of a zone in the network." The Examiner cites column 4, lines 1-20 for allegedly showing this feature. (Office Action, p. 3.) But the cited portion merely describes detecting a threshold event in an application within a network device, and responding to the threshold event by, for example, notifying the network manager. (*Black*, col. 4:1-19.) The

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cited portion of Black is silent with regard to "a maximum size threshold" or "a zone in the

network," and no such disclosure is provided elsewhere in the document.

Moreover, the "threshold" disclosed by Black appears to be the same feature relied

on by the Examiner for showing Applicant's "gathering information about the network." (See

supra.) However, Black's "threshold" cannot be considered to be both Applicant's claimed

"gather[ed] information" and "maximum threshold." Accordingly, Black also fails to disclose

"determining a maximum size threshold of a zone in the network," as recited in claim 1.

Because Black fails to disclose or suggest the above-noted features of claim 1, Black

cannot support a rejection of claim 1 under Section 102(e). Claim 1 is, therefore, allowable

over Black.

Claims 10 and 19: Independent claims 10 and 19 although of different scope than

claim 1, recite similar features to the above-identified features of claim 1 missing from Black.

Accordingly, claims 10 and 19 are allowable for the same reasons as set forth above with

regard to claim 1.

Claims 2-9, 11-18 and 19-27: Dependent claims 2-9, 11-18 and 19-27 are allowable

at least due to their corresponding dependence from independent claims 1, 10 and 19

VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the appeal.

IX. **Evidence Appendix**

None.

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X. Related Proceedings Appendix

None.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

Claims involved in the appeal of U.S. Patent Application Serial No. 10/667,862:

1. (Original) A method of determining a network management scalability threshold of a network manager with respect to a network, comprising:

gathering information about the network;

gathering information about the network manager; and

determining a maximum size threshold of a zone in the network based on the gathered network information and the gathered network manager information.

2. (Original) The method of claim 1, wherein:

the information about the network manager includes an amount of memory available to the network manager; and

the determining includes assigning a value to the maximum size threshold of a zone in the network based on the amount of memory available to the network manager.

3. (Original) The method of claim 2, wherein:

the information about the network includes a number of each type of node in the network, and a ratio of switches to other types of nodes in the network; and

the determining includes decreasing the maximum size threshold of a zone in the network if the ratio of switches to other types of nodes in the network exceeds a first threshold, and increasing the maximum size threshold of a zone in the network if the ratio of switches to other types of nodes in the network is below a second threshold.

4. (Original) The method of claim 3, wherein:

the information about the network includes a total number of connections between each switch in the network and other nodes in the network, and a ratio of a) the total number of connections to b) a number of nodes in the network; and

the determining includes decreasing the maximum size threshold of a zone in the network if the ratio of the total number of connections to nodes exceeds a third threshold, and increasing the maximum size threshold of a zone in the network if the ratio of the total number of connections to the number of nodes in the network is below a fourth threshold.

- 5. (Original) The method of claim 4, wherein the number of connections is a number of connections between the switches in the network and other nodes in the network.
- 6. (Original) The method of claim 4, wherein:

the information about the network includes a number of interfaces in the network, and a ratio of a) interfaces in the network to b) nodes in the network; and

the determining includes decreasing the maximum size threshold of a zone in the network if the ratio of interfaces to nodes equals or exceeds a fifth threshold, and increasing the maximum size threshold of a zone in the network if the ratio of interfaces to nodes in the network is below a sixth threshold.

- 7. (Original) The method of claim 6, wherein the fifth and sixth thresholds are the same, the first threshold is greater than the second threshold, and the third threshold is greater than the fourth threshold.
- 8. (Original) The method of claim 1, wherein the network is a zone candidate or subset of a larger network and includes specific nodes.

- 9. (Original) The method of claim 1, comprising preventing the network manager from discovering or managing a zone of the network having a size exceeding the determined maximum size threshold.
- 10. (Original) A system for determining a network management scalability threshold of a network manager with respect to a network, comprising:

means for gathering information about the network, gathering information about the network manager, and determining a maximum size threshold of a zone in the network based on the gathered network information and the gathered network manager information; and

means for connecting the network manager to the network.

11. (Original) The system of claim 10, wherein:

the information about the network manager includes an amount of memory available to the network manager; and

the means for gathering and determining assigns a value to the maximum size threshold of a zone in the network based on the amount of memory available to the network manager.

12. (Original) The system of claim 11, wherein:

the information about the network includes a number of each type of node in the network, and a ratio of switches to other types of nodes in the network; and

the means for gathering and determining decreases the maximum size threshold of a zone in the network if the ratio of switches to other types of nodes in the network exceeds a first threshold, and increases the maximum size threshold of a zone in the network if the ratio of switches to other types of nodes in the network is below a second threshold.

13. (Original) The system of claim 12, wherein:

the information about the network includes a total number of connections between each switch in the network and other nodes in the network, and a ratio of a) the total number of connections to b) a number of nodes in the network; and

the means for gathering and determining decreases the maximum size threshold of a zone in the network if the ratio of the total number of connections to nodes exceeds a third threshold, and increases the maximum size threshold of a zone in the network if the ratio of the total number of connections to the number of nodes in the network is below a fourth threshold.

- 14. (Original) The system of claim 13, wherein the number of connections is a number of connections between the switches in the network and other nodes in the network.
- 15. (Original) The system of claim 13, wherein:

the information about the network includes a number of interfaces in the network, and a ratio of a) interfaces in the network to b) nodes in the network; and

the means for gathering and determining decreases the maximum size threshold of a zone in the network if the ratio of interfaces to nodes equals or exceeds a fifth threshold, and increases the maximum size threshold of a zone in the network if the ratio of interfaces to nodes in the network is below a sixth threshold.

- 16. (Original) The system of claim 15, wherein the fifth and sixth thresholds are the same, the first threshold is greater than the second threshold, and the third threshold is greater than the fourth threshold.
- 17. (Original) The system of claim 10, wherein the network is a zone candidate or subset of a larger network and includes specific nodes.

- 18. (Original) The system of claim 10, wherein the means for gathering and determining prevents the network manager from discovering or managing a zone of the network having a size exceeding the determined maximum size threshold.
- 19. (Original) A machine readable medium comprising a computer program for causing a computer to perform:

gathering information about a network;

gathering information about a network manager arranged to monitor the network; and determining a maximum size threshold of a zone in the network based on the gathered network information and the gathered network manager software program information.

20. (Original) The medium of claim 19, wherein:

the information about the network manager includes an amount of memory available to the network manager; and

the determining includes assigning a value to the maximum size threshold of a zone in the network based on the amount of memory available to the network manager.

21. (Original) The medium of claim 20, wherein:

the information about the network includes a number of each type of node in the network, and a ratio of switches to other types of nodes in the network; and

the determining includes decreasing the maximum size threshold of a zone in the network if the ratio of switches to other types of nodes in the network exceeds a first threshold, and increasing the maximum size threshold of a zone in the network if the ratio of switches to other types of nodes in the network is below a second threshold.

22. (Original) The medium of claim 21, wherein:

the information about the network includes a total number of connections between each switch in the network and other nodes in the network, and a ratio of a) the total number of connections to b) a number of nodes in the network; and

the determining includes decreasing the maximum size threshold of a zone in the network if the ratio of the total number of connections to nodes exceeds a third threshold, and increasing the maximum size threshold of a zone in the network if the ratio of the total number of connections to the number of nodes in the network is below a fourth threshold.

- 23. (Original) The medium of claim 22, wherein the number of connections is a number of connections between the switches in the network and other nodes in the network.
- 24. (Original) The medium of claim 22, wherein:

the information about the network includes a number of interfaces in the network, and a ratio of a) interfaces in the network to b) nodes in the network; and

the determining includes decreasing the maximum size threshold of a zone in the network if the ratio of interfaces to nodes equals or exceeds a fifth threshold, and increasing the maximum size threshold of a zone in the network if the ratio of interfaces to nodes in the network is below a sixth threshold.

- 25. (Original) The medium of claim 24, wherein the fifth and sixth thresholds are the same, the first threshold is greater than the second threshold, and the third threshold is greater than the fourth threshold.
- 26. (Original) The medium of claim 19, wherein the network is a zone candidate or subset of a larger network and includes specific nodes.

27. (Original) The medium of claim 19, comprising a computer program for causing a computer to perform:

preventing the network manager from discovering or managing a zone of the network having a size exceeding the determined maximum size threshold.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None